

REMARKS

This Response is in response to the second final Office action mailed on 24 February 2005 (Paper No. 8). Claims 1 through 3, 5 through 10 and 12 through 19 are pending.

In Paper No. 8, the Examiner has rejected claims 1-3, 12, 13 and 16 under 35 U.S.C. 103 (a) as being unpatentable over Ganesh et al, U.S. Pub No. 2002/0051450 in view of USP 5,802,278 to Isfeld et al. In Paper No. 8, the Examiner also rejected claims 5-7, 9, 17 and 18 under 35 U.S.C. 103 (a) as being unpatentable over Ganesh '450 in view of USP 5,138,611 to Carn et al. The Examiner also rejected claims 8, 9, 19 under 35 U.S.C. 103 (a) as being unpatentable over Ganesh '450 in view of Carn '611 and further in view of Isfeld '278. The Examiner also rejected claims 14 and 15 under 35 U.S.C. 103 (a) as being unpatentable over Ganesh '450 in view of Isfeld '278 and further in view of Carn '611. Applicant has the following comments.

Regarding the rejection of claims 5-7, 9 17 and 18 using Carn '611, the Examiner relies on Ganesh '450 for every feature except the filtering of packets when the source and destination addresses are the same. The Examiner turns to FIGS. 25 and 26 (esp. Col 33, lines 1-10) of Carn '611 for a teaching of this feature. Then, on page 10 of the Office action, the Examiner justifies the use of Carn '611 to fill in for the deficiencies of Ganesh '611 by stating, on page 10 of Paper No. 8 that such filtering of packets where the source and destination addresses are one of the same prevents routing in a loopback mode. Applicant

disagrees.

Applicant submits that loopback mode is separate from and entirely unrelated from when the source and the destination addresses of a packet are the same. Loopback mode is merely a test mode where a destination port sends a reply to the source indicating that the message was received by the destination port and thus the destination port is functioning properly. Loopback mode does not necessarily occur when the source and the destination addresses of a packet are the same. The filtering of packets where the source and destination addresses are the same does not imply in any way that the destination port is in a loopback mode.

In lines 1 through 10 of column 33 of Carn ‘611 describe a validating procedure for a message. In this paragraph are listed three possible reasons to invalidate a message. One reason is when the source and destination addresses are the same. A second is when the destination address is in loopback mode. The third reason is when the destination address does not exist. There is no teaching anywhere that states that loopback mode occurs when the source and destination addresses are the same. Further, an understanding of “loopback mode” would show that loopback mode has absolutely nothing to do with the situation where the source and destination address for a packet are the same. Applicant submits that Carn ‘611 states that loopback mode is a separate reason for invalidating a message than the source and destination addresses are the same. Because the Examiner failed to provide, in

Paper No. 8, a credible motivation to turn to Carn '611 to fill in for the deficiencies of Ganesh '450, the rejection of claims 5-7, 9 17 and 18 must be withdrawn since there is no prima facie 103 rejection.

Applicant further submits that one having ordinary skill in the art would not be inclined to turn to Carn '611 to fill in for the deficiencies of Ganesh '450. Ganesh '450 pertains to look up tables in a memory in a switching device. The look-up tables have destination addresses stored therein. In Ganesh '450, each port has a memory with a look-up table, and the entries for each port are unique based on past usage of that port. Ganesh '450 seeks to save on memory space by customizing the entries stored in the memory at each port. Carn '611 pertains to a coupler used in a computer network, the coupler having junctors that decide which channel will be used to forward information on to a destination. In Carn '611, if the destination channel is busy, a request to retransmit is put in a queue and then retransmitted when the channel becomes free. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference about a coupler that seeks channels to send a packet to fill in for a reference that pertains to saving memory space by managing entries in a table stored in memory. The goals these two references seeks to save are so diverse that there is no credible reason to combine them with each other.

Applicant further submits that Carn '611 does not pertain to memory conservation or to look-up tables. Carn '611 never even teaches the existence of look up tables containing

destination addresses. Carn '611 seeks to solve a problem entirely unrelated to that of Ganesh '450. In addition, Ganesh '450 does not pertain to and never even mentions different channels used to forward messages to a destination. Ganesh '450 also does not disclose a central coupler with junctors that select channels to send packets to their destinations. Ganesh '450 further does not mention what happens when a channel is busy. This is because the purpose and construction of Ganesh '450 and Carn '611 are entirely unrelated. Because of the complete dissimilarity between Carn '611 and Ganesh '450, the rejection of claims 5-7, 9 17 and 18 cannot stand.

Regarding the rejection of claims 1-3, 12, 13 and 16 using Isfeld '278, the Examiner relies on Ganesh '450 for a teaching of every feature except for a teaching of the
1) sending of the "unknown" signal from the central table to the port when the central table does not have the destination address of a packet stored in its memory and 2) a broadcasting of the packet by a port to all other ports when an address not found in the central table. In Paper No. 8, the Examiner then relies on columns 38 and 52 of Isfeld '278 for a teaching of these features. The Examiner, at the bottom of page 4 of Paper No. 8, justifies the combining of Isfeld '278 with Ganesh '450 by stating that the motivation to combine "is to allow the port that requests the destination address search to flood the frame only when no port number is found from the central bridging routing table so that each of the other ports will determine if its own port is the next correct port to use to receive the frame, otherwise if the local port will direct the frame to the corresponding port found from the central routing table."

Applicant disagrees.

Applicant first notes that Ganesh '450 also teaches flooding or broadcasting to all ports at the middle of paragraph 0030. Therefore, Applicant submits that there is no need to again broadcast the packet to all ports when broadcasting already occurs in Ganesh '450. Because the broadcasting is already done in Ganesh '450 Applicant submits that there is no further need to broadcast so that "other ports will determine if its own port is the next correct port to receive the frame" as alleged by the Examiner on the bottom of page 4 of Paper No. 8. Applicant submits that from the flooding of Ganesh '450 and without the Isfeld '278 reference, the ports will still be able to determine if it is to receive the packet in question, thus negating the need to turn to Isfeld '278 to do what has already been done in Ganesh '450. Because the motivation supplied by the Examiner on page 4 of Paper No. 8 to combine Isfeld with Ganesh is not credible, the 35 U.S.C. 103 rejection to claims 1-3, 12, 13 and 16 can not stand.

Applicant further submits that the Examiner is applying hindsight reconstruction in the rejection of claims 1-3, 12, 13 and 16 by using Applicant's claimed invention as a blueprint from which the Examiner picks and chooses different features from Ganesh '450 and Isfeld '278 to arrive at Applicant's exact invention. In Paper No. 8, the Examiner never explains why Applicant's exact invention would result if Isfeld '278 were to be combined with Ganesh '450.

Applicant teaches that if the local port does not have the destination address, the central table is consulted, and only when the central table does not also have the destination address for the packet does the local port broadcast the packet to all ports. Ganesh '450 teaches that the broadcasting to all ports occurs when the local port does not have the destination address and before the central table is accessed. Isfeld '278 teaches that the local port is first consulted, and if the destination address is not found, the central table is then consulted, and only when the central table also does not have the destination address is the packet is broadcasted. Applicant submits that there is no motivation present as to why one having ordinary skill in the art would modify Ganesh '450 using Isfeld '278 in such a way as to change when the broadcasting is to occur and to change the conditions when broadcasting is to occur so that Applicant's exact invention results. Further, Applicant submits that the motivation supplied by the Examiner on the bottom of Page 4 of Paper No. 8 does not explain why the broadcasting should happen after the central table has been accessed and found not to contain the destination address instead of before when the central table is accessed. Therefore, the rejection of claims 1, 2, 3, 12, 13 and 16 cannot stand.

Applicant further submits that one having ordinary skill in the art would not be inclined to turn to Isfeld '278 to fill in for the deficiencies of Ganesh '450. Ganesh '450 pertains to saving memory by providing each port with a custom made list of destination addresses to store in a memory and a method of managing these lists. Isfeld '278 pertains to a bridge router that can connect together different types of networks by internetworking

and allowing for the interconnection of diverse input/output modules. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference that pertains to providing for interconnection of diverse networks and diverse input/output devices to fill in for the deficiencies of a reference that is about economizing memory space by managing data in a memory space. Because of this, the rejection of claims 1, 2, 3, 12, 13 and 16 must be withdrawn.

No fees are incurred by the filing of this response.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicant
Registration No.: 27,774

1522 "K" Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56257
Date: 5/24/05
I.D.: REB/ML